



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,767	11/27/2001	Ming-Sum Fang	12283	7588
25763	7590	12/16/2009		
DORSEY & WHITNEY LLP INTELLECTUAL PROPERTY DEPARTMENT SUITE 1500 50 SOUTH SIXTH STREET MINNEAPOLIS, MN 55402-1498			EXAMINER AGWUMEZIE, CHARLES C	
			ART UNIT 3685	PAPER NUMBER
			MAIL DATE 12/16/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* MING-SUM FANG and ALAN J. SIMS

---

Appeal 2009-004922  
Application 09/993,767  
Technology Center 3600

---

Decided: December 16, 2009

---

Before HUBERT C. LORIN, BIBHU R. MOHANTY, and  
KEVIN F. TURNER, *Administrative Patent Judges*.

TURNER, *Administrative Patent Judge*.

DECISION ON APPEAL

## STATEMENT OF CASE

Appellants seek our review under 35 U.S.C. § 134 of the final rejections of claims 1, 3-5, 7, 8, 10, 11, 13-17, 20-23, 25-27, 29, 30, 32, 33, 35-39 and 42-69. We have jurisdiction under 35 U.S.C. § 6(b).

## SUMMARY OF THE DECISION

We AFFIRM-IN-PART<sup>1</sup>.

## THE INVENTION

Appellants' claimed invention relates to a method and apparatus for downloading information such as an application or configuration data to a card terminal via a network and for monitoring transaction data or other activity across card terminals via a network. (Spec. p.1, ll. 8-10).

Independent claims 1, 8, and 16 which are deemed to be representative, reads as follows:

1. A method for downloading an application to a card terminal from a remote network connection, comprising:
  - receiving from the remote network connection a request to download an application to the card terminal using a processing arrangement;
  - monitoring the card terminal using the processing arrangement to detect at least one activity of a financial transaction performed at the card terminal;
  - detecting the at least one activity performed at the card terminal; and

---

<sup>1</sup> Our decision will make reference to the Appellants' Appeal Brief ("Br.," filed Apr. 24, 2008) and the Examiner's Answer ("Ans.," mailed Jun. 5, 2008).

based on the detection procedure, electronically transmitting to the card terminal information related to the request for use in downloading the application to the card terminal.

8. A method for providing configuration data to a card terminal via a remote network connection, comprising:

receiving information from the remote network connection relating to configuring the card terminal using a processing arrangement;

generating configuration data from the information which at least one of enables or performs reconfiguration of the card terminal according to the received information;

monitoring the card terminal using the processing arrangement;

detecting at least one activity of a financial transaction performed at the card terminal; and

based on the detection procedure, electronically transmitting the configuration data to the card terminal in order to reconfigure the card terminal according to the configuration data.

16. A method for providing information to a remote network connection concerning activity at a card terminal, comprising:

monitoring the card terminal using a processing arrangement to detect at least one activity of a financial transaction performed at the card terminal;

detecting the at least one activity performed at the card terminal; and

based on the detection procedure, generating information relating to the at least one activity for network transmission and display.

### THE REJECTION

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Valliani et al.	6,234,389 B1	May 22, 2001
Desai et al.	6,877,093 B1	Apr. 5, 2005
Lynch et al.	6,963,908 B1	Nov. 8, 2005

The Examiner rejected claims 1, 3-5, 7, 8, 10, 11, 13-17, 20-23, 25-27, 29, 30, 32, 33, 35-39 and 42-69<sup>2</sup> under 35 U.S.C. § 103(a) as being unpatentable over Desai, Valliani, and Lynch.

Rather than repeat the arguments of Appellants or the Examiner, we make reference to the Brief and the Answer for their respective details. Only those arguments actually made by Appellants have been considered in this decision. Arguments that Appellants did not make in the Brief have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

### ISSUE

Have Appellants shown the Examiner erred in rejecting claims 1, 3-5, 7, 8, 10, 11, 13-17, 20-23, 25-27, 29, 30, 32, 33, 35-39 and 42-69 under 35 U.S.C. § 103(a) as being unpatentable over Desai, Valliani, and Lynch?

---

<sup>2</sup> Claim 20 depends upon cancelled claim 19. Our decision will assume this improper dependency to be a typographical error and further assume Appellants intended claim 20 to depend upon independent claim 16.

## FINDINGS OF FACT

The record supports the following findings of fact (FF) by at least a preponderance of the evidence. *In re Caveney*, 761 F.2d 671, 674 (Fed. Cir. 1985) (explaining the general evidentiary standard for proceedings before the Office).

1. Independent claim 1 recites, “. . . based on the detection procedure, electronically transmitting to the card terminal information related to the request for use in downloading the application to the card terminal.” (Br. appx. 1). Claim 23 recites a similar limitation. (Br. appx. 5)

2. Independent claim 8 recites, “. . . based on the detection procedure, electronically transmitting the configuration data to the card terminal in order to reconfigure the card terminal according to the configuration data.” (Br. appx. 2). Claim 30 recites a similar limitation. (Br. appx. 6).

3. Independent claim 16 recites, “. . . based on the detection procedure, generating information relating to the at least one activity for network transmission and display.” (Br. appx. 4). Claim 38 recites a similar limitation. (Br. appx. 7-8).

4. The Examiner found Desai to, “not teach detecting at least one activity such as a financial transaction at a card terminal and in response to the detection downloading an application to the terminal.” (Ans. 5).

5. Claims 16 and 38 do not recite the limitation the Examiner found to not be disclosed in Desai. Specifically, claims 16 and 38 do not electronically transmit any information or data to the card terminal based on the detection procedure.

*Desai*

6. Desai is directed to a system and method for secure transaction processing over a network which allows it to provision and configure a transaction processing device. (col. 3, ll. 46-50).

7. Desai describes a credit and debit card processing terminal which operates upon the swipe of a card across the card reader of the processing terminal. Once the card is swiped, information associated with the transaction is transmitted over a network to a financial institution's server which in turn sends back authorization information to the retailer's credit and debit card processing terminal. (col. 1, ll. 44-61).

8. Desai describes that upon receiving authorization from the issuing bank, a printer prints a receipt for the customer to sign. (col. 1, ll. 62-65).

9. Desai's system enables a user to update their configuration information on transaction processing devices through a web based user interface which eliminates the need to provide configuration capability on the transaction processing device itself. (col. 4, ll. 47-54 and col. 12, ll. 56-65).

10. Desai discloses that when a user configures a transaction processing device, a configuration request is sent to the configuration server through a communication protocol stack, such as a TCP/IP stack. (col. 10, ll. 25-27 and ll. 59-60).

*Lynch*

11. Lynch is directed to a method and system for transferring information from a first computing device to a web site and then from the web site to a second computing device. (Abs.).

12. Lynch discloses that, “. . . a user who has multiple devices may want to duplicate the “look and feel” across each device.” (col. 21, ll. 30-32).

13. Lynch describes that a user may decide to purchase, through the server system, an upgraded version of a software program. (col. 7, ll. 62-67 and col. 8, ll. 1-5).

*Valliani*

14. Valliani is directed to a point of sale system which provides a PCMCIA compliant device and add-on module which includes a magnetic card reader for processing sales transactions. (Abs.).

15. This PCMCIA-compliant device and add-on modules are designed to work with a portable computing device, thus forming a portable point of sale transaction terminal. (Abs.).

## PRINCIPLES OF LAW

During examination of a patent application, pending claims are given their broadest reasonable construction consistent with the specification. *In re Prater*, 415 F.2d 1393, 1404 (CCPA 1969); *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).



“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). *See also KSR*, 550 U.S. at 407 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”)

#### ANALYSIS

*Claims 1, 3-5, 7, 8, 10, 11, 13-17, 20-23, 25-27, 29, 30, 32, 33, 35-39 and 42-69 rejected under 35 U.S.C. § 103(a) as being unpatentable over Desai, Valliani, and Lynch.*

#### *Independent claims 1 and 23*

Appellants argue *inter alia* that Desai, Valliani, and Lynch fail to teach, suggest or disclose, “detecting at least one activity of a financial transaction, and based upon the detection, electronically transmitting to the card terminal information related to the request for use in downloading the application to the card terminal, as recited in independent claims 1 and 23.” (Br. 12). In response to this argument, the Examiner found,

Desai et al. do not teach detecting at least one activity such as a financial transaction at a card terminal and in response to the detection downloading an application to the terminal. Lynch et al. teach detecting a financial transaction (e.g. use of a credit card) at a terminal (e.g. PC, laptop, pda) (citation omitted) and in response to the detecting of the transaction downloading a computer application to a terminal (citation omitted).

(Ans. 5).

We disagree with the Examiner and find Appellants' arguments to be compelling.

As Appellants suggest, Lynch does not disclose the limitation "detecting at least one activity of a financial transaction, and based upon the detection, electronically transmitting to the card terminal information related to the request for use in downloading the application to the card terminal." (Br. 8-13). We agree with Appellants and find that Lynch's system transfers information from a first computing device to a second computing device and during this transfer may identify software capable of being upgraded through a purchase which may be completed through the server system. (FF 11, 13).

In contrast, Appellants' claims 1 and 23 specify electronically transmitting to the card terminal information related to the request for use in downloading the application to the card terminal, based on detecting at least one activity (FF 1), rather than purchasing a software upgrade as disclosed in Lynch. (FF 13). Therefore, we find the Examiner erred in rejecting claims 1 and 23 as being obvious over Desai, Valliani, and Lynch. As such, we find that the rejections of claims 3-5, 7, 25-27, 29, 45, 46, 50, 51, 54, 57, 60, 62, 64, and 67 depending from claims 1 and 23 respectively, to also be made in error for the same reasons discussed *supra*.

*Independent claims 8 and 30*

Appellants argue Desai, Valliani, and Lynch fail to teach, suggest or disclose, “detecting at least one activity of a financial transaction performed at the card terminal, and based on the detection procedure, electronically transmitting the configuration data to the card terminal in order to reconfigure the card terminal.” (Br. 13).

In response to this argument, the Examiner found,

Desai et al. do not teach detecting at least one activity such as a financial transaction at a card terminal and in response to the detection downloading an application to the terminal. Lynch et al. teach detecting a financial transaction (e.g. use of a credit card) at a terminal (e.g. PC, laptop, pda) (citation omitted) and in response to the detecting of the transaction downloading a computer application to a terminal (citation omitted).

(Ans. 5).

We disagree with the Examiner and find Appellants’ arguments to be compelling.

As Appellants suggest, Lynch does not disclose the limitation “detecting at least one activity of a financial transaction performed at the card terminal, and based on the detection procedure, electronically transmitting the configuration data to the card terminal in order to reconfigure the card terminal.” (Br. 13-17). We agree with Appellants and find that Lynch’s system transfers information from a first computing device to a second computing device and during this transfer may identify software capable of being upgraded through a purchase which may be completed through the server system. (FF 11, 13). In contrast, Appellants’ claims 8

and 30 specify electronically transmitting configuration data to the card terminal in order to reconfigure the card terminal, based on detecting at least one activity (FF 1), rather than purchasing a software upgrade as disclosed in Lynch. (FF 13). Therefore, we find the Examiner erred in rejecting claims 8 and 30 as being obvious over Desai, Valliani, and Lynch. As such, we find that the rejections of claims 10, 11, 13-15, 32, 33, 35-37, 47, 52, 55, 58, 61, 63, 65, and 68 depending from claims 8 and 30 respectively, to also be made in error for the same reasons discussed *supra*.

*Independent claims 16 and 38*

Appellants argue Desai, Valliani, and Lynch fail to teach, suggest or disclose, “monitoring a card terminal to detect an activity of a financial transaction performed at the card terminal, much less detecting the activity and, based on the detection procedure, generating information relating to the activity for network transmission and display, as recited in claims 16 and 38.” (Br. 18). Specifically, Appellants argue that, “[t]he only “detection” feature cited by the Examiner in Lynch relates to an ordinary purchase transaction over a network . . .” (Br. 18).

We are not persuaded by Appellants’ arguments and we agree with the Examiner’s finding that Desai does not teach, “detecting at least one activity such as a financial transaction at a card terminal and in response to the detection downloading an application to the terminal.” (emphasis added). (Ans. 5, *see also*, FF 4). However, claims 16 and 38 do not require the same steps or processes required by independent claim 1 which the Examiner chose as exemplary for purposes of grouping the claim rejections. (FF 5).

Claims 16 and 38 recite, *inter alia*, monitoring a card terminal to detect an activity of a financial transaction performed at the card terminal, and based on the detection procedure, generating information related to the activity for network transmission and display. Thus, in contrast to independent claims 1 and 23, which *inter alia*, include the step of downloading an application to the terminal in response to the detection of a financial transaction (FF 1), and independent claims 8 and 30, which *inter alia*, electronically transmit configuration data to the card terminal in order to reconfigure the card terminal in response to the detection of a financial transaction (FF 2), claims 16 and 38 only generate information relating to the at least one activity for network transmission and display in response to the detection of the at least one activity performed at the card terminal. (FF 3, 5).

As a result of this distinction, the Examiner's statement that Desai does not teach, "detecting at least one activity such as a financial transaction at a card terminal and in response to the detection downloading an application to the terminal," (FF 4) (emphasis added), is immaterial to an analysis of claims 16 and 38. (FF 5). Thus, we find that Desai describes a credit and debit card processing terminal which operates upon the swipe of a card across the card reader of the processing terminal which we interpret as monitoring at least one financial activity performed at the terminal. (FF 7). This swiping of a credit or debit card causes the card terminal to generate and transmit information (i.e., authorization request) related to the at least one activity based on the detection (i.e., swipe) of the at least one activity performed at the card terminal. (FF 7). This authorization request is then transmitted over a network to a financial institution's server which in turn

sends back the authorization information to the retailer's credit and debit card processing terminal which is then printed for the customer to sign. (FF 7, 8). Therefore, Appellants' argument that Desai, Valliani, and Lynch fail to teach, suggest or disclose, "monitoring a card terminal to detect an activity of a financial transaction performed at the card terminal, much less detecting the activity and, based on the detection procedure, generating information relating to the activity for network transmission and display. . ." is not persuasive as to error in the rejection.

Additionally, Appellants' assert there is, "no teaching [sic] suggestion, motivation or incentive" and that the Examiner is using impermissible hindsight to combine Desai, Valliani, and Lynch. (Ans. 19-20). To the extent Appellants seek an explicit suggestion or motivation in the reference itself, this is no longer the law in view of the holding in *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). The Examiner has provided an articulated reasoning with rational underpinning for why a person with ordinary skill in the art would modify the method for secure provisioning and configuration of a transaction processing device in Desai (FF 6) to use the downloading features found in Lynch (FF 11), with the point of sale transaction system disclosed in Valliani. (FF 14). Thus, a person with ordinary skill in the art would know from the scanning software which detects and determines changes in application settings and files in Lynch to apply this technique to Desai and Valliani since all references contemplate the transmission of data over a communication network through the use of a terminal. (FF 7, 11, 15). Therefore, Appellants' argument is not persuasive as to error in the rejection.

*Claims 17, 20-22, 39, 42-44, 48, 49, 53, 56, 59, 66, and 69*

Appellants do not separately argue claims 17, 20-22, 39, 42-44, 48, 49, 53, 56, 59, 66, and 69 depending from claims 16 and 38 respectively, and so have not sustained their burden of showing that the Examiner erred in rejecting 17, 20-22, 39, 42-44, 48, 49, 53, 56, 59, 66, and 69 under 35 U.S.C. § 103(a) as unpatentable over Desai, Valliani, and Lynch for the same reasons we found as to claims 16 and 38, *supra*.

#### CONCLUSION OF LAW

We conclude that the Appellants have shown that the Examiner erred in rejecting claims 1, 3-5, 7, 8, 10, 11, 13-15, 23, 25-27, 29, 30, 32, 33, 35-37, 45-47, 50-52, 54, 55, 57, 58, 60-65, 67 and 68 under 35 U.S.C. § 103(a) as being unpatentable over Desai, Valliani, and Lynch.

We conclude that the Appellants have not shown that the Examiner erred in rejecting claims 16, 17, 20-22, 38, 39, 42-44, 48, 49, 53, 56, 59, 66, and 69 under 35 U.S.C. § 103(a) as being unpatentable over Desai, Valliani, and Lynch.

#### DECISION

The decision of the Examiner to reject claims 1, 3-5, 7, 8, 10, 11, 13-15, 23, 25-27, 29, 30, 32, 33, 35-37, 45-47, 50-52, 54, 55, 57, 58, 60-65, 67 and 68 under 35 U.S.C. § 103(a) is REVERSED. The decision of the Examiner to reject claims 16, 17, 20-22, 38, 39, 42-44, 48, 49, 53, 56, 59, 66, and 69 under 35 U.S.C. § 103(a) is AFFIRMED.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv)(2007).

AFFIRMED-IN-PART

ack

cc:

DORSEY & WHITNEY LLP  
Intellectual Property Department  
Suite 1500  
50 South Sixth Street  
Minneapolis, MN 55402-1498